## REMARKS

Claims 1-11 and 13-30 are currently pending in the subject application and are presently under consideration.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

## I. Rejection of Claims 1, 9 and 28 Under 35 U.S.C. §103(a)

Claims 1, 9 and 28 stand rejected under 35 U.S.C. §103(a) as being anticipated by Grosser *et al.* (US 6,826,552) and further in view of Garg (US 6,044,357). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Grosser *et al.* in view of Garg does not teach or suggest each and every limitation of applicants' claimed invention.

> To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *See* MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *See In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The subject invention relates to methods and systems for identifying a sub-population of a population to solicit and a sub-population of the population not to solicit that will maximize profits for an advertiser performing solicitation. For instance, applicants' claimed invention can take a sample of a population of potential purchasers, divide the sample into a solicitation group and a non-solicitation group, and solicit the solicitation group. Tracking of purchases and non-purchases by members of each group allows for a model to be constructed that can be used against the entire population to identify a sub-population to solicit and a sub-population not to

solicit that will maximize profits. Applicants' claimed invention minimizes solicitation of members who will not make a purchase, who are already planning on buying, and/or who planned on buying but will not buy if solicited, thereby reducing cost of solicitation. The method also increases solicitation to a subset of members who will buy if solicited, thereby maximizing purchases. In particular, as recited in independent claims 1 and 28, applicants' claimed invention employs a computer-implemented component to ***identify the sub-population to solicit and a non-solicited sub-population by using a computer-implemented decision theoretic model ... setting a solicitation variable to a first value for each of a plurality of members of the solicitation sub-population and to a second value for each of a plurality of members of the non-solicitation sub-population*** and ***sets a purchase variable to a first value for each of the plurality of members of the solicitation and the non-solicitation sub-population that made a purchase and to a second value for each of the plurality of members of the solicitation and the non-solicitation sub-populations that did not make the purchase.***

Grosser *et al.* does not teach or suggest the aforementioned novel aspects of applicants' claimed invention. Rather, Grosser *et al.* discloses a computer aided decision making system that assists a user in making a decision regarding large purchases, such as a home or automobile. Applicants' claimed invention is focused on aiding a seller/advertiser in making a decision on which members of a group of potential buyers should be sent a solicitation/advertisement. The prior art is focused on aiding a buyer in making a purchase decision concerning several purchase options. The system of Grosser *et al.* will employ a search engine to seek out purchase proposals that meet a user's requirements. The system further allows the user to solicit input from one or more advocates (family member, friend, etc.) on proposals. The system allows advocates who are not solicited to provide input. These advocates provide their opinions on the proposals, but are not themselves making purchases The user is then able to evaluate the proposals and the feedback from advocates, and reject proposals. The Examiner cites col 5, lines 22-40 of the prior art as teaching the *setting a solicitation variable to a first value for each of a plurality of members of the solicitation sub-population and to a second value for each of a plurality of members of the non-solicitation sub-population.* However, this section merely states that one of the advocates may provide unsolicited advice if they see a large difference between the purchase proposals. It does not state that any variables are set for each member to indicate which members are solicited or unsolicited.

Moreover, the Examiner cites col 5, lines 48-52 and col 10, lines 26-44 as teaching *setting a purchase variable to a first value for each of the plurality of members of the solicitation and the non-solicitation sub-population that made a purchase and to a second value for each of the plurality of members of the solicitation and the non-solicitation sub-populations that did not make the purchase*. On the contrary, these sections describe the user interface providing a means for the user to enter their purchase requirements, so that advocates can provide advice and a report screen that tracks which proposals the user is still considering and which have been rejected. Grosser *et al.* does not teach a user of the system sending solicitations to potential buyers and then setting a purchase variable to a first value for those potential buyers that made a purchase and setting the purchase variable to a second value for those potential buyers that did not make a purchase as in applicants' claimed invention. Rather, the reference teaches sending solicitations to advocates for feedback and does not set any solicitation variable or purchase variable for each advocate. Grosser *et al.* is not concerned with purchase decisions of advocates, but instead gathering input from the advocates so that the user of the system can make a purchase decision. Therefore, Grosser *et al.* does not teach or suggest setting a solicitation variable to a first value for each of a plurality of members of the solicitation sub-population and to a second value for each of a plurality of members of the non-solicitation sub-population and sets a purchase variable to a first value for each of the plurality of members of the solicitation and the non-solicitation sub-population that made a purchase and to a second value for each of the plurality of members of the solicitation and the non-solicitation sub-populations that did not make the purchase as in applicants' claimed invention. Garg also is silent regarding setting either a solicitation or purchase variable for each member of a population as taught in the subject claim. Garg discloses evaluating marketing strategies, but employs aggregated demand variables for a population for tracking success.

Furthermore, Grosser *et al.* and Garg do not teach or suggest *identifying the sub-population to solicit and a non-solicited sub-population by using a computer-implemented decision theoretic model*. Applicants' claimed invention teaches a system that identifies a sub-population to solicit and a sub-population not to solicit by employing a decision theoretic model. The model identifies the solicited and non-solicited sub-populations based upon how solicitation will maximize profits for the advertiser. Grosser *et al.* is concerned with assisting a buyer in determining where to purchase from multiple proposals possibly from a variety of sellers. The

cited reference simply teaches soliciting advocates for feedback concerning purchase proposals, not for the advocates to make a purchase. *Grosser et al. does not identify the solicited and non-solicited populations by employing a decision theoretic model.* Rather, the reference discloses that the user of the system chooses which advocates to solicit for feedback. Moreover, Garg discloses a model to maximize profits through management of marketing, operations, and finance activities, however, Garg fails to teach or suggest the a decision theoretic model is employed to *identify the solicited and non-solicited populations.* Therefore, contrary to assertions in the Office Action, Grosser *et al.* and Garg do not teach or suggest *identifying the sub-population to solicit and a non-solicited sub-population by using a computer-implemented decision theoretic model.*

In view of at least the foregoing, applicants' representative respectfully submits that Grosser *et al.* and Garg, alone of in combination, fail to teach or suggest all limitations of applicants' invention as recited in independent claims 1 and 28 (and claim 9 that depends there from), and thus fails to make obvious the claimed invention. Therefore, this rejection should be withdrawn.

## II. Rejection of Claims 2-8, 11, 13-27, 29 and 30 Under 35 U.S.C. §103(a)

Claims 2-8, 11, 13-27, 29 and 30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Grosser *et al.*, in further view of Garg, (US 6,044,357) as applied to claim 1 above, and further in view of Kohavi (US 6,182,058). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Grosser *et al.* in view of Garg and Kohavi does not teach or suggest each and every limitation of applicants' claimed invention.

Independent claims 11 and 24 (similarly to independent claims 1 and 28) recite ***setting the solicitation variable to the first value for each of a plurality of members of the solicitation group and to the second value for each of a plurality of members of the non-solicitation group; setting the purchase variable to the first value for each of the plurality of members of the solicitation and the non-solicitation groups that made a purchase and to the second value for each of the plurality of members of the solicitation and the non-solicitation groups that did not make the purchase;... applying the decision tree against the population to identify the sub-population to solicit.*** As discussed *supra* with respect to independent claims 1 and 28, Grosser *et al.* and Garg fail to teach or suggest these novel features of the subject claims.

Furthermore, Kohavi fails to make up for the deficiencies of Grosser *et al.* and Garg with respect to these claimed features. Rather, Kohavi discloses a hybrid classifier, called the NB-Tree classifier, for classifying a set of records. In an example, Kohavi teaches a marketing campaign where responses are tracked to determine who is likely to respond. However, Kohavi fails to teach a solicitation variable that is set to the first value for each of a plurality of members of the solicitation group and to the second value for each of a plurality of members of the non-solicitation group. Kohavi does not indicate that unsolicited members are tracked and therefore would not need to set a solicitation variable. Furthermore, Kohavi also fails to teach a purchase variable that is set with a first value for purchase and a second value for non-purchase. A likeliness to respond is not analogous to a purchase. A recipient of the marketing campaign may respond, such as to request more information or look at a product, without ever making a purchase. Moreover, Kohavi fails to mention purchase or buy anywhere in the patent.

Therefore, Grosser *et al.*, Garg and Kohavi do not teach or suggest setting the solicitation variable to the first value for each of a plurality of members of the solicitation group and to the second value for each of a plurality of members of the non-solicitation group and setting the purchase variable to the first value for each of the plurality of members of the solicitation and the non-solicitation groups that made a purchase and to the second value for each of the plurality of members of the solicitation and the non-solicitation groups that did not make the purchase;... and applying the decision tree against the population to identify the sub-population to solicit to maximize the expected increase in profits as in applicants' claimed invention.

Claims 2-8 and 29-30 depend from independent claims 1 and 28 respectively. As discussed above with respect to independent claims 11 and 24, Kohavi fails to cure the above noted deficiencies of Grosser *et al.* and Garg regarding independent claims 1 and 28.

In view of at least the above, it is respectfully submitted that Grosser *et al.*, Garg and Kohavi, alone or in combination, fail to teach or suggest all aspects of applicants' invention as recited in independent claims 1, 11, 24, and 29 (and claims 2-8, 13-23, and 25-27 that depend there from), and thus fails to make obvious the subject claimed invention. This rejection should be withdrawn.

III. **Rejection of Claim 10 Under 35 U.S.C. §103(a)**

Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Grosser *et al.*, in further view of Garg (US 6,044,357), as applied to claim 1 above, and further in view of Cooper *et al.* (US 5,737,416). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. The cited art, alone or in combination, do not teach or suggest each and every feature of applicants' claimed invention.

Claim 10 depends from independent claim 1. Cooper *et al.* fails to cure the above noted deficiencies of Grosser *et al.* and Garg with respect to independent claim 1. Cooper *et al.* discloses a system for allowing a producer of software to provide a trial period for use of the software when a potential buyer initiates a request for said software, while maintaining security over the files to prevent piracy. Cooper fails to teach or suggest solicitation and non-solicitation sub-populations and maintaining a solicitation and purchase variable for members of each group. Cooper *et al.* is silent regarding setting a solicitation variable to a first value for each of a plurality of members of the solicitation sub-population and to a second value for each of a plurality of members of the non-solicitation sub-population; setting a purchase variable to the first value for each of the plurality of members of the solicitation and the non-solicitation groups that made a purchase and to the second value for each of the plurality of members of the solicitation and the non-solicitation groups that did not make the purchase;... and applying the decision tree against the population to identify the sub-population to solicit.

Accordingly, withdrawal of this rejection is respectfully requested.

## CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP282US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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